Spring 2005

Kansas Environmental News

Secretary's Corner

This spring the Kansas Department of Health and Environment is working on a new statewide effort to promote recycling, composting and hazardous waste collection and will be kicking off a new campaign over the next six months. The effort ties in with what the Kansas Don't Spoil It! campaign has promoted for many years: taking actions to preserve our environment. Watch for more details about our campaign in the weeks ahead.

More than 300 professionals, business operators, public employees and others from across Kansas attended the 11th annual WORKS! Conference on recycling, composting and household hazardous waste management. The conference provides KDHE with valuable feedback regarding solid waste management initiatives. One example is e-waste collections. KDHE has been working to develop ways to improve e-waste recycling in the state. Much discussion is underway at the federal and state level about the growing amount of electronics that are being sent to landfills. Recent pilot projects in Kansas have been successful in getting e-waste diverted from landfills, and research is underway regarding how to expand this project.

Earth Day 2005 was a success with promotions throughout the state regarding how to preserve Kansas. KDHE once again joined with the Kansas Historical Society for the annual History and Environmental Fair at the Kansas History Museum, to provide a fun and educational experience for adults and school children around the state. The event held April 14 also recognized environmental accomplishments of Kansans.

KDHE recently concluded a series of public hearings around the state regarding proposed regulations to address wastewater lagoons at livestock facilities. These regulations will ensure additional protections are put in place for livestock facilities. Kansas regulations require groundwater protection for many practices, but research has shown the importance of site-specific regulations, especially when dealing with sensitive groundwater areas where shallow groundwater and sandy soil increases the vulnerability to the groundwater resource. KDHE staff met with many interested groups and individuals concerning these changes, and is now in the process of reviewing and researching issues brought up in public comments and during the public hearings.

Now that spring is finally here, many of us will be spending more time outside enjoying our beautiful state. Let's do our best to take good care of it, and encourage everyone around us to do the same!

Be Well,

Roderick L. Bremby
KDHE Secretary

Inside this issue:

KDHE Hires New Bureau Director

by Cathy Colglazier, Public Advocate

John Mitchell was recently named the Director of the Bureau of Environmental Field Services for the Kansas Department of Health and Environment (KDHE) where he will direct a statewide staff of over 100 employees. In this position, Mitchell will be responsible for statewide operations of environmental programs in KDHE's six district offices as well as directing the work of the Topeka based Technical Services and Use Assessment sections.

Mitchell has worked for KDHE for over 25 years. Mitchell came to KDHE in 1980 serving as District Sanitarian for both the Northeast and Southeast Districts. Most of Mr. Mitchell's career has been spent in programs of the Bureau of Waste Management where most recently, he was Chief of the Waste Compliance, Enforcement, and Policy Section where he was responsible for overall compliance and enforcement activities related to both hazardous and solid waste management. Prior to that position Mr. Mitchell served as Chief of the Hazardous Waste Section and was responsible for all hazardous waste management program activities including facility permitting.

Mr. Mitchell received a bachelor's degree in Biology and Microbiology from the University of Kansas in 1975 as well as a MS degree in Environmental Health Science, which he received in 1984. Mitchell's wife Pam is an elementary school teacher and the Mitchells have two children, a daughter Taylor, 13, and a son Matt, 8. The Mitchells live in Lawrence.

Air Quality Conference

May 31, 2005

Are you looking for a great way to stay up to date with Kansas air quality issues? Join us for our one-day teleconference on May 31, 2005. Topics to be covered include:

- construction permits
- emission inventory
- regional haze
- operating permits
- compliance issues
- regulatory updates

Live presentations will be made from KDHE in Topeka with audio/video being broadcast to the following satellite sites:

- KSU - Salina campus, Salina
- University of Kansas, Edwards campus, Overland Park
- WSU campus, Wichita

The teleconference will include a question-and-answer dialog at each satellite site. Seating is limited for this ***FREE*** workshop, so choose your preferred site and register by May 24 on the KSU Small Business Environmental Assistance Web site at *http://www.sbeap.org/2005aqc.html* or by calling SBEAP at 800-578-8898.

KDHE Regulations in Process

The following table depicts the KDHE regulations that are in the process of being developed, amended, or revoked. If you have questions on any of the regulations, feel free to contact Cathy Colglazier at 800-357-6087.

Regulation	Division Draft	EPA Review	DOA Review	AG Review	Public Hearing	Effective
Waste Management						
Definitions (A)	1/05	N/A	*4/05	*5/05	*7/05	*9/05
Tires (A)	2/04	N/A	*4/05	*5/05	*7/05	*9/05
Hazardous Waste Update (A)	*6/05	*6/05	*7/05	*8/05	*10/05	*12/05
Industrial Landfills	*1/06	N/A	*3/06	*4/06	*6/06	*8/06
Air and Radiation						
Acid Rain Permits (A)	*5/05	N/A	*7/05	*8/05	*11/05	*12/05
Acid Rain Nox (N)	*5/05	N/A	*7/05	*8/05	*11/05	*12/05
Definitions (A)	3/05	N/A	*6/05	*7/05	*10/05	*11/05
Inventory Report Regs	7/04	N/A	1/05	2/05	*6/05	*7/05
Transportation Conformity (A)	10/04	N/A	*7/05	*8/05	*11/05	*12/05
Permitting Rules (A)	*5/05	N/A	*6/05	*7/05	*10/05	*12/05
Water						
Surface WQS	5/04	*3/05	6/04	6/04	10/04	12/04
Geology						
Water Well (GMD #2) (N)	2/04	N/A	1/05	3/05	*6/05	*7/05
Livestock Waste Management						
Groundwater (N) (A) (R)	12/03	N/A	5/04	11/04	3/05	*8/05
Environmental Remediation						
Surface Mining	9/03	N/A	*12/04	*3/05	*6/05	*9/05
Environmental Use Control	6/04	N/A	*2/05	*5/05	*9/05	*12/05

New (N), Amended (A), Revoked (R)
* Denotes projected date.

Updated 4/1/05

Kansas Issues New Fish Consumption Advisories

by Steve Cringan, Bureau of Environmental Field Services

The Kansas Department of Health and Environment (KDHE) and the Kansas Department of Wildlife and Parks (KDWP) have issued new fish consumption advisories for 2005. Fish consumption advisories do not mean Kansas fish are unsafe to eat, but are simply guidelines for the public to make informed choices about their health and diet. The advisories identify species of fish that should be eaten in limited quantities, or in some cases, avoided altogether because of contamination found in tested fish.

The new advisories include guidelines for mercury, PCBs and perchlorate in addition to chlordane; previous advisories had only included chlordane. In addition, the new advisories also now include guidelines for lead and cadmium in shellfish. Trend data from most Kansas long-term monitoring sites show a decrease in the major contaminants involved in this advisory: mercury, PCBs, and chlordane. PCBs have not been in use in the U.S. since the 1970's and chlordane use was discontinued in 1988. Chlordane levels have declined dramatically statewide and PCB levels are expected to follow. PCBs and chlordane degrade slowly, so it takes decades for them to be completely removed from the environment, even after use is discontinued.

The advisories assess cancer risk levels using EPA methods. Cancer risk assessment is a method to determine the added increase in cancer levels in a population if fish in the advisory areas are consumed regularly over a 70-year period. Assessments that estimate the increased risk of cancer as greater than one in 100,000 are determined to be unacceptably high-risk levels. Risk assessments for non-carcinogens (mercury, lead and cadmium) were based on 8-ounce meal size for adults and 4-ounce meal size for children over 9 years of age.

Ten water-body specific advisories for several contaminants were issued (*http://www.kdhe.state.ks.us/news/web_archives/2005/01072005.html*), along with the following state-wide advisory regarding mercury in fish:

The Environmental Protection Agency (EPA) has issued a national fish consumption advisory for mercury which recommends consuming no more than one 8-ounce meal per week of non-commercial (locally caught) fish. EPA bases this on nationwide average mercury levels in various species of fish, and recommends first consideration be given to local advisories. KDHE and KDWP do not apply the EPA advisory to bottom-feeding, bottom-dwelling fish based on state data. KDHE and KDWP do recommend the national mercury advisory for sight-feeding predatory fish, such as largemouth bass. Additional testing for mercury is underway on sight-feeding predatory fish in Kansas and additional data will be available in late 2005.

New Resource for Local Governments

by Cathy Colglazier, Public Advocate

A new resource exists for local governments wanting to implement an Environmental Management System (EMS). An EMS is a tool that provides an organization with an approach to manage all environmental aspects of a business or operation. A growing number of local governments around the country are using EMSs to improve their environmental performance, compliance, and community relations, while reducing costs.

The Kansas State University's Pollution Prevention Institute (KSU PPI) has recently accepted an offer from the Public Entity EMS Resource (PEER) Center to become an EMS Local Resource Center. The PEER Center, a collaboration between the Office of Water at U.S. EPA and the Global Environment and Technology Foundation (GETF), provides information and tools to help public entities (primarily local governments) understand and adopt environmental management systems (EMSs) for their operations.

As an EMS Local Resource Center, KSU PPI will provide a range of EMS services to local governments including education, training, workshops, and guidance. One such session at this year's Environment Conference will feature an overview of EMSs and PEER Center Resources. For more information, contact KSU PPI at 800-578-8898 or go to the PEER Center Web site at *www.peercenter.net.*

Hazardous Waste Handler's Training for Kansas Generators

by Cathy Colglazier, Public Advocate

Kansas regulations (K.A.R. 28-31-4(h)) require companies that produce hazardous waste in quantities more than 55 pounds a month but less than 2,200 pounds to ensure their employees are "thoroughly familiar with proper hazardous waste handling and emergency procedures." These regulations can be found at the Kansas Department of Health and Environment (KDHE) Web site: *http://www.kdhe.state.ks.us/waste/download/hw_laws_oct2004.pdf* on page 24.

To assist businesses with meeting this requirement, the Kansas Small Business Environmental Assistance Program (SBEAP), operated by Kansas State University's Pollution Prevention Institute, has developed an online training program. Although the regulation doesn't list the specifics of the training, the Kansas environmental regulatory agency, KDHE, has approved this Web-based training as adequate for hazardous waste handlers to meet the above training requirement.

To access the training, go to *http://www.sbeap.org/waste/welcome.htm*. The following information describes how to use the training program:

1. Each training item is introduced through a slide or series of slides with text, photos, or examples to clarify the lesson.

2. The second slide will ask the employee a question or series of questions about the lesson that must be answered correctly in order to proceed to the next lesson.

3. The employee or student is encouraged to use KDHE's Hazardous Waste Generator Handbook (*http://www.kdhe.state.ks.us/waste/apps-hw/e_hw_gen_handbook.pdf*) and/or the K.A.R. resources referenced above to help them complete each lesson (each lesson will reference a section in KDHE's manual or the respective K.A.R.)

4. The students may proceed at their own rate, but should plan on approximately 1-2 hours to complete the course.

5. Upon completion of the course, the student will be forwarded to a "Training Award" page that asks for your personal data. This form can then be printed and given to your supervisor as verification of program completion.

The SBEAP maintains a toll-free technical hotline and can visit your facility to review compliance issues and identify pollution prevention opportunities. Call SBEAP at 800-578-8898 or visit their Web site at *www.sbeap.org* for free, confidential, technical assistance.

Has your business implemented a project that's eligible for a pollution prevention award? Check out the Pollution Prevention Award application at *http://www.kdhe.state.ks.us/sbcs/download/2005_p2_awards_application.pdf* for information on the awards program. Applications are due June 24, 2005. An awards luncheon will be held at the annual Kansas Environment Conference on Wednesday, August 24, 2005 to recognize the award recipients. Get your application in now so you can receive the recognition you deserve!

P2 Case Study - Sedgwick County Fleet Management

by Nancy Larson, KSU Pollution Prevention Institute

Sedgwick County Fleet Management provides vehicle maintenance and collision repair service to a fleet of more than 700 vehicles. Marvin Duncan, director, Sedgwick County Fleet Management, recalls the day in 1998 when he interviewed for his current position: *"When I toured the fleet facility, I noticed there were about 50 or more drums on the shop floor and 16 solvent parts washers, and technicians carried aerosol cans of brake cleaner out of the storeroom by the armfuls. The shop was so dimly lit, it appeared to have dirt floors."* The county reassured Duncan they would support the necessary changes and asked him to be part of a team that would help plan a new facility and re-invent fleet management at Sedgwick County.

One of the first steps Duncan took while planning the new facility was to contact the Kansas State University Pollution Prevention Institute (PPI) to request a pollution prevention (P2) assessment. *"Sherry Davis toured our facility in 1999, and she was very gentle with us. She told us we had a lot of opportunity for improvement, but things were really not too bad,"* Duncan recalls. Sherry detailed P2 recommendations in a report that focused on inventory control, solvent-use reduction, body shop efficiency, and new technologies. Her report also included cost benefit analysis for specific P2 options.

Establish a team: ***Change the process***

In 1997, Sedgwick County set a departmental goal to reduce hazardous waste generation by 25% by the year 2000. Duncan and his staff, which he refers to as "Team Fleet," achieved a 25% hazardous waste reduction by 2000, but it didn't stop there. After prioritizing recommendations made in the P2 assessment report, they began to slowly eliminate solvent parts washers. Instead of the 16 parts washers they had in 1998, the shop now houses only six solvent parts washers, two aqueous washers, and one paintgun cleaning system. Boyd Powers and Matthew Endsley, both shop foremen, indicate that tight preventive maintenance (PM) of the fleet eliminated the need for heavy engine overhauls and as a result, the parts washers are not used as much. In addition to the fleet PM program, Endsley has instituted a PM program for the shop equipment as well. *"Each mechanic is assigned to monitor specific shop equipment for leaks or problems and must document the PM check,"* explains Endsley. These PM programs have encouraged employees to take pride and ownership in the facility, equipment, and successes they have achieved.

Inventory tracking: ***Change the technology***

Duncan and "Team Fleet" instituted an electronic fleet management system using software called "FASTER CS." This change in technology tracks material use per vehicle and per technician, and allows the entire team access to vehicle maintenance history and supply inventory. The software enables team members to make fact-based decisions, instead of guesses or estimates, allowing for just-in-time ordering, material-use tracking, and identification of problem vehicles, resulting in tight inventory control and decreased wastes. *"With a fleet of 729 vehicles and more than 5000 work orders processed yearly, it used to take a room full of file cabinets to store all the paperwork orders and related reports. That has all been eliminated now and is kept in a central database available via the computer for all to use,"* explains Crystal Bourrett. Bourrett manages the inventory control system for bulk storage products as well as other chemical products that are tracked by mechanics as they are issued. For example, brake cleaning solvent is now issued in refillable aerosol cans from secured bulk storage. The cans are inscribed with the individual mechanic's name. The 250-gallon solvent tank that used to have open access has been replaced with one 55-gallon drum that is under controlled access. The 50 or more 55-gallon drums that used to sit on the shop floor have been eliminated. These simple changes in technology or processes result in waste reductions.

Inventory tracking: ***Change the material and the technology***

Over in the collision repair shop, paint technicians no longer order a gallon of paint to get the half pint they needed for a small job. *"Today our technicians now have a Dupont-provided precision mix system, scales, stock, and tints to mix exactly what they need in their shop,"* explains Duncan. All paint purchases are now centrally controlled through the stock room. In fact, despite a higher cost, the body shop staff lobbied to change the material and switched to a higher quality paint, one that offered better UV protection, extending the life of the vehicle paint job. In addition, a new downdraft paint booth was installed which used a filtered air system, decreasing the contaminants that used to enter the paint booth

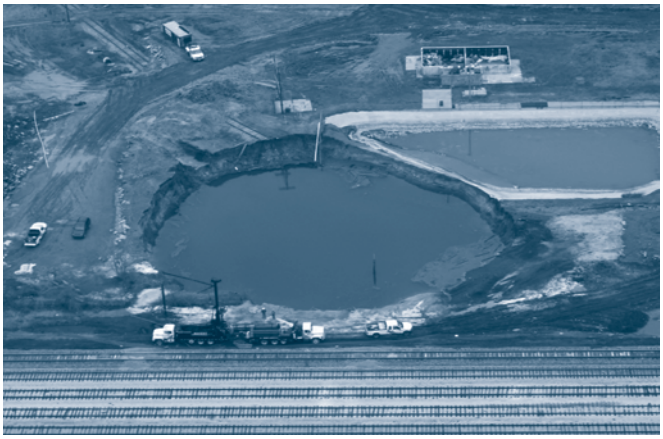
through their old system. These changes in material and technology resulted in decreased need for supplemental vehicle paint and fewer touch-ups, thus decreasing labor costs, raw material use, and hazardous waste expenses. High-volume, low-pressure (HVLP) paint guns are now cleaned in an enclosed gun washer that is part of a closed-loop, solvent-recycling system. These changes in material and technology have resulted in a 60% decrease in raw material purchases between 2000 and 2003; and instead of generating gallons of waste paint solvent, they now generate a brick of solid hazardous waste.

As the numbers clearly indicate, Sedgwick County Fleet Management is one of Kansas' Best of the Best when it comes to looking at pollution prevention opportunities and embracing them for change. Duncan has been documenting hard numbers since 2000 and charts a 92 percent decrease in pounds of hazardous waste disposed of between 2000 and 2003. In the same time period, solvent expenses decreased by 89 percent, and paint material costs decreased by 46 percent. Duncan still leases solvent-cleaning systems from a vendor and has decreased those expenses by 25 percent over the last three years. He plans to eliminate some of the remaining solvent-cleaning lease expenses by purchasing and managing his own units in 2005. These decreases in raw material expenses and hazardous waste generation and disposal also add up to decreased air emissions and liabilities.

Duncan likens the process of instituting pollution prevention at their facility to peeling an onion, *"We have begun to remove several layers, but we know there are still more to go."* He credits the PPI P2 assessment report for helping them focus and prioritize. He looks to 2005 and beyond when he plans to remove the next "onion layer" by reviewing their remaining chemical inventory for less-hazardous alternatives. In addition, Sedgwick County Fleet Management is in the process of combining all of their procedures into an environmental management system. In the spring of 2004, they were recognized nationally by the Association of Equipment Managers for meeting unique challenges in delivering cost-effective management of mixed fleets of on-road and off-road equipment. All of these efforts and successes are the result of teamwork and certainly qualify them as one of Kansas' Best of the Best!

Sink Hole Developing in Hutchinson

by Mike Cochran, KDHE Bureau of Water



The evening of January 3, 2005, I received a telephone call at home from the City of Hutchinson advising me a sinkhole had developed at the old Carey salt solution mining facility near the BNSF mainline railroad tracks in the southeast part of Hutchinson and I should probably come out and take a look. I left home early the next morning and spent the next few days in Hutchinson with the City of Hutchinson Fire Department, the owners of the sinkhole and their consultants and the railroad working to evaluate the potential impact to the railroad tracks. Efforts continue at this time to protect the railroad tracks from the sinkhole.

What caused this sinkhole? This is the location of old brine well identified as well #19. The well was used for the production of brine for the production of salt. This well was constructed in 1917 and plugged in 1931. Brine wells have been constructed and operated in the Hutchinson area since the late 1880s. Prior to enactment of the KDHE brine well (salt solution mining) regulations in 1979, these wells were constructed and operated in a manner that resulted in the wells being susceptible to subsidence and resulting sinkhole formation at the ground surface, even after being plugged for many years. Modern methods of brine well construction and operation under the KDHE regulations are directed to prevent subsidence and resulting sinkhole formation. For more information on the sinkhole, contact Mike Cochran of KDHE at 785-296-5560.

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2005 Kansas Environment Conference

August 23 - 25, 2005
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Wichita, Kansas

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